I. Strategy Cost Breakdown

Strategy Cost Assumptions

The following estimates are being provided for implementing each of the strategies specified in Section VI of the plan. The costs have been placed within a standard framework to facilitate comparative analysis and decision-making. The dollar figures identified within the framework have been footnoted to list the assumptions associated with each amount. Overall assumptions include:

- All dollar figures shown are in constant dollars
- All values are considered to be incremental (additional costs on top of current planned expenditures)
- Costs are considered to be estimates and reasonably conservative
- Each framework accounts for years 1, 2, and 3 of the Strategic Technology Plan
- Additional out-year costs are noted where relevant

The definitions for each of the cost categories listed in the framework are as follows:

I. Capital Costs

A. ***Project Planning***—Associated with the phase where a project is conceived and subsequently documented in a proposal to define the project objectives and business value, as well as an initial analysis of costs, benefits, complexity, risks, and resource requirements.

B. ***Project Development***—Associated with strengthening and refining the business case for the project prior to acquisition, implementation, and maintenance funding being granted, including requirements analysis, alternatives analysis, and total cost of ownership analysis.

C. ***Implementation***—Associated with the realization of the strategy.

1. ***Hardware***—Hardware including servers, computers, network infrastructure, cabling, telecommunications, and other related costs.

2. ***Software***—Software including application licenses, databases, development or other software tools and reporting tools.

3. ***Staffing***—Human resources dedicated to the project including:

   - ***Professional Contract Assistance***—Outside consulting service fees.
   - ***Temporary Assistance***—Staff hired for short-term durations to provide assistance, usually in areas that do not require significant professional expertise.
   - ***ITS Support*** – Information and Telecommunications Services staff.
   - ***Agency Staff***—County staff other than ITS staff required for such tasks as requirements definition, plan development, workflow re-engineering, etc.

4. ***Support***—Application, network or other related assistance received from hardware or software vendors or service providers.

5. ***Project Expenses***—Associated with the implementation of the strategy that do not fall within other categories.

6. ***Other***—Areas not previously addressed within the Capital Costs section.
7. ***Contingency***—Additional costs to account for events or costs that are not expected.

II. Production (Operating Costs)

A. ***Facilities***—Costs associated with facilities – buildings, offices, and structures that can be attributed to the project or strategy.

B. ***Maintenance***—Ongoing, post-implementation costs associated with maintaining systems including hardware and software.

C. ***Licenses***—Annual software or other license fees.

D. ***Upgrades***—Associated with upgrading hardware, software and other areas.

E. ***Interest***—Interest on loans or other debt related to technology costs.

F. ***Staffing***—Ongoing costs associated with additional staffing required for the strategy or project.

G. ***Training***—Costs associated with user and/or technical training assistance.

H. ***Hardware***—Purchased hardware including servers, computers, network infrastructure, cabling and other related costs.

I. ***Other***—Other ongoing costs that were not captured within other Operating Cost categories.

Strategy Summary Cost Table

Strategy	Year 1		Year 2		Year 3		Total (Years 1 – 3)		Ongoing Operating Costs (Year 4 and beyond)	
	Capital	Operating	Capital	Operating	Capital	Operating	Capital	Operating	Costs	FTE
A1- Service-Level Agreements	200,000		100,000				300,000			
A2- Help Desk			107,500	304,500		244,500	107,500	549,000	244,500	3
A3- Digital Academy		72,500		72,500		72,500		217,500	72,500	
A4- Public Internet			260,000	430,000	260,000	428,000	520,000	858,000	412,000	4
A5- Intranet/Extranet			415,000	424,000	415,000	440,000	830,000	864,000	432,000	4
B1- Asset Management	500,000	100,000		160,000		160,000	500,000	420,000	160,000	1
B2- Standard Operating Procedures	240,000		110,000	62,500		62,500	350,000	125,000	62,500	1
B3- System Security	450,000	171,000		321,000		321,000	450,000	813,000	155,000	1
B4- Business Continuity	450,000						450,000			
C1- Standardize Technology	225,000						225,000			
C2- Web-based Technology	340,000	309,000	150,000	674,000	150,000	1,001,000	640,000	1,984,000	972,000	9
C3- Application Integration	250,000						250,000			
C4- Commercial Applications										
C5- Consolidate Hardware			1,400,000				1,400,000			
C6- Broadband/PBX	350,000		1,290,000	325,000	2,530,000	552,000	4,170,000	877,000		
C7- Enterprise Data Management	500,000						500,000			
C8- LSJ Integration										
C9- (See Below)										
D1- Performance Measurement										
D2- Develop Technology Plans										
D3- Project Management	150,000						150,000			
D4- Reorganize Technology Functions	500,000						500,000			
D5- Specialized Training		781,250		781,250		556,250		2,118,750	31,250	.5
TOTALS:	**4,155,000**	**1,433,750**	**3,832,500**	**3,554,750**	**3,355,000**	**3,837,750**	**11,342,500**	**8,826,250**	**2,541,750**	**23.5**
C9- Enterprise Applications	850,000		17,770,000	100,000	8,270,000	2,400,000	26,890,000[1]	2,500,000	5,340,000	

[1]C9 – Enterprise Applications: Cost estimates for Year 4 and beyond include $27,570,000 in additional capital and operating costs ($5,340,000 of which is ongoing); the capital project is expected to be complete in Year 4.

A. Service Delivery

A1. Utilize service-level agreements as a standard way of doing business.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance	200,000[2]	100,000[2]		
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	200,000	100,000		
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs	200,000	100,000		300,000

[2] Outside contractor developing SLAs at an average of 80 hours each at a rate of $150/hour times an estimated 25 SLAs. An average of 80 hours is estimated although hours will vary by area as current SLAs require revision and others require full development. Current SLAs exist for Server Operations, LAN, Mail, Distributed Systems Services, Website Development and Maintenance, GIS, Hardware Maintenance, and Voice Systems. Areas lacking SLAs include Mainframe, Networking, Application Development, Systems Support, and Help Desk. An additional eleven were added to this count (14) to account for multiple service agencies within each service area (e.g., central and agency help desks). Costs of ongoing review, enforcement and maintenance of SLAs will be absorbed by agency staff.

A2. Reorganize the help desk function around a more centralized, streamlined, and coordinated model.

Costs	Years			3-Year Total
	1	2	3	
I. Capital Costs				
A. Project Planning		75,000[3]		
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application		25,000[4]		
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance		7,500[5]		
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs		107,500		
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance		4,500[6]	4,500[6]	
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing		240,000[7]	240,000[7]	
G. Training		60,000[8]		
H. Hardware				
I. Other				
Subtotal Operating Costs		304,500	244,500	
Grand Total Costs		412,000	244,500	656,500

[3] 500 contractor hours @ $150/hour to review current platforms, determine capabilities, and develop a plan for reorganization
[4] Software license costs for full standard version of HEAT- 10 concurrent users @ $2,407/user, as quoted by Competitive Technologies (local re-seller/implementer of HEAT). Additional user licenses will be required in the future as agency help desks align with the centralized help desk on the same software platform.
[5] Vendor fees for implementation of HEAT as quoted by Competitive Technologies
[6] Maintenance fees based on 10 users as quoted by Competitive Technologies
[7] 3 Full Time Equivalents (FTEs) @ $75,000/year for salary and benefits plus $5,000/year for support services (phone, computer, etc.)
[8] Training costs estimated for existing help desk personnel and any new staff regarding new operating procedures and new help desk technology- 2 sessions/year/staff @ $3,000/session

A3. Utilize the State of Washington's Digital Academy to promote learning.

Costs	Years 1	Years 2	Years 3	3-Year Total
I. Capital Cost				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance				
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs				
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training	60,000[9]	60,000[9]	60,000[9]	
H. Hardware				
I. Other	12,500[10]	12,500[10]	12,500[10]	
Subtotal Operating Costs	72,500	72,500	72,500	
Grand Total Costs	72,500	72,500	72,500	217,500

[9] Three agencies, two sessions/year @ $10,000/agency/session as quoted by Washington DIS staff. NOTE: These sessions would be specifically designed for King County.

[10] Mileage- Thirteen weeks/session, one day/week, fifteen staff at each session, assume ten round trips to Olympia/session = 260 round trips/year @ $47.45/round trip (130 miles @ $.365/mile), rounded

A4. Use the Internet as a primary mechanism to deliver public information and services.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers		240,000[11]	240,000[12]	
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools		20,000[13]	20,000[13]	
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance				
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs		260,000	260,000	
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance			6,000[14]	
C. Licenses		10,000[15]	10,000[15]	
D. Upgrades				
E. Interest				
F. Staffing		400,000[16]	400,000[16]	
G. Training		20,000[17]	12,000[17]	
H. Hardware				
I. Other				
Subtotal Operating Costs		430,000	428,000	
Grand Total Costs		690,000	688,000[18]	1,378,000[19]

[11] Two web/application servers and one database server, each with an additional fail-over server (six total @ $40,000/server for first three years)
[12] Additional servers purchased each year to address new growth in Internet offerings, considered as Capital costs
[13] Two sets Windows 2000 web deployment software (one for each web/application server purchased)
[14] 20% of prior license purchases. Ongoing server maintenance and content management costs are assumed to be absorbed by agency staff
[15] One enterprise license of SQL server
[16] Lead developer and team of three staff @ $80,000 salary plus 25% overhead each- 4 staff X $100,000/staff. These staff are expected to be dedicated to strategy implementation.
[17] Training- $5,000/person for Year 2, $3,000/person ongoing
[18] Costs will continue past Year 3 as the County continues to expand use of the Internet and enhance functionality. Costs for Year 4 are anticipated to mirror those in Year 3, and, thereafter, a slower rate of expansion will result in reducing ongoing capital costs.
[19] Development costs are included in these costs. Content management costs are excluded and assumed to be absorbed by current agency staff. Costs do not include complex systems integrations.

A5. Promote and support the development of the employee intranet and partner extranet to improve information services and business process support.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers		160,000[20]	160,000[20]	
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application		50,000[21]	50,000[21]	
• Database				
• Development Tools		30,000[22]	30,000[22]	
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance		175,000[23]	175,000[23]	
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs		415,000	415,000	
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance			16,000[24]	
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing		400,000[25]	400,000[25]	
G. Training		24,000[26]	24,000[26]	
H. Hardware				
I. Other				
Subtotal Operating Costs		424,000	440,000	
Grand Total Costs		839,000	855,000	1,694,000

[20] Two web servers, one database server and one database server backup- 4 total @ $40,000/server. Ongoing costs include additional server and application costs similar to Year 3, with these costs reducing as demand is met.
[21] Package applications as part of web-enabled service offerings to employees and business partners
[22] SQL Server enterprise license
[23].5 FTE of consulting for planning and development- 1,000 hours @ $175/hour
[24] 20% of prior license costs
[25] Lead developer and team of three staff. Average of $80,000 salary plus 25% benefits/overhead ($100,000/staff X 4 staff). Staff costs do not represent redundant resources with other strategies. These resources are intended to serve departments and agencies by developing specialized applications for intranet/Internet
[26] Two weeks/year/person (4 staff X 2 weeks/staff = 8 weeks @ $3,000/week = $24,000)

B. Operations

B1. Establish a comprehensive asset management function.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development	75,000[27]			
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application	300,000[28]			
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance	125,000[29]			
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	500,000			
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance		60,000[30]	60,000[30]	
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing	100,000[31]	100,000[31]	100,000[31]	
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs	100,000	160,000	160,000	
Grand Total Costs	600,000	160,000	160,000	920,000

[27] 500 contractor hours @ $150/hour to define policies and procedures
[28] Asset Management software as quoted by Intraware (assume approximately 50,000 assets @ $6/asset)
[29] Typical implementation fee for asset management application, including training costs, as quoted by Intraware
[30] 20% of software cost each year which includes support and yearly licensing as quoted by Intraware
[31] Experienced Asset Manager @ $80,000 salary plus 25% benefits/overhead

B2. Develop standard operating procedures to guide all agencies' technology staff.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance	200,000[32]	50,000[32]		
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other	40,000[33]	60,000[33]		
7. Contingency				
Subtotal Capital Costs	240,000	110,000		
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing		62,500[34]	62,500[34]	
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs		62,500	62,500	
Grand Total Costs	240,000	172,500	62,500	475,000

[32] Contracted SOP development as identified in the following strategies: Help Desk, Strengthen Security, Enterprise Data Management, Intranet & Extranet, and Consolidate IT Function. Others required include Programming, Maintenance, Training, Administration, and Operations- Average $25,000 (approximately 165 hours @ $150/hour) for each SOP. Assume eight SOPs developed in Year 1 and two in Year 2.

[33] Once SOPs are developed, staff require training related to procedures. Costs estimated at $20,000/quarter for Year 1, Quarters 3 and 4, and Year 2, Quarters 1, 2, and 3. Year 3 and beyond training costs will be absorbed by internal staff.

[34] Assume one FTE for maintenance of SOPs- $50,000 salary + 25% benefits/overhead. Anything over one FTE will be absorbed internally.

B3. Strengthen system security.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network	120,000[35]			
• Telecommunications				
2. Software				
• Application	30,000[36]			
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance	300,000[37]			
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	450,000			
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance	30,000[38]	30,000[38]	30,000[38]	
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing	125,000[39]	125,000[39]	125,000[39]	
G. Training	16,000[40]	16,000[40]	16,000[40]	
H. Hardware				
I. Other		150,000[41]	150,000[41]	
Subtotal Operating Costs	171,000	321,000	321,000	
Grand Total Costs	621,000	321,000	321,000	1,263,000

[35] Six new firewalls
[36] Intrusion Detections Software (IDS)- 8 – 10 copies
[37] Security assessment and consulting- 1,500 hours at $200/hour
[38] 20% of licensing for firewalls and IDS
[39] Security manager- $100,000 salary plus 25% benefits/overhead
[40] Four training sessions per year ($4,000/session based on local classes taught by Verisign) to address firewalls, intrusion detection, security incident handling and general network security
[41] Ongoing security penetration testing and consulting- 750 hours each year at $200/hour

B4. Strengthen business continuity capabilities.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance	450,000[42]			
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	450,000			
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs	450,000			450,000

[42]Approximately 3000 contractor hours @ $150/hour – used either to assist the Governance group in developing a plan, or to continue planning at a detailed technical level supporting the Governance group. These costs represent planning activities and do not account for implementation costs. Initial planning efforts will be conducted by the Governance group and focus on mission-critical enterprise functions, including applications, telecommunications, hardware/network, and facilities. This strategy assumes the plan will be developed at a moderate level of detail.

C. Architecture (web, applications, and infrastructure)

C1. Standardize technology including infrastructure, hardware, and applications software.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance	225,000[43]			
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	225,000			
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs	225,000			225,000

[43] 1,500 contractor hours @ $150/hour for identifying, selecting and recommending standards for each relevant technology. Technologies requiring standardization include Operating systems, Databases, Hardware, Office Automation, Reporting tools, Routers, Network printing devices, Cabling, Network cards and drivers, hubs and switches. Ongoing maintenance of and enforcing compliance with the standards is assumed to be conducted by the TMB.

C2. Standardize Web-based technology used on the intranet, Internet, and extranet.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers	160,000[44]	80,000[45]	80,000[45]	
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application	160,000[46]	60,000[47]	60,000[47]	
• Database				
• Development Tools	20,000[48]	10,000[49]	10,000[49]	
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance				
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	340,000	150,000	150,000	
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance		36,000[50]	54,000[50]	
C. Licenses		20,000[51]	20,000[51]	
D. Upgrades				
E. Interest				
F. Staffing	300,000[52]	600,000[52]	900,000[52]	
G. Training	9,000[53]	18,000[53]	27,000[53]	
H. Hardware				
I. Other				
Subtotal Operating Costs	309,000	674,000	1,001,000	
Grand Total Costs	649,000	824,000	1,151,000	2,624,000

[44] 2 pairs of Dual-CPU Intel servers @ $40,000 each
[45] Anticipate two additional servers each year for growth in years 2 & 3. Depending on the mix of strategies selected for implementation, there may be some opportunity to reduce the number of servers required overall, but separate servers will be needed for the Intranet and Inter/Extranet. It is likely that server costs will continue after Year 3 associated with continued development of web applications
[46] Content Management System- Assume two server licenses. Typical costs are $30 – $40,000 per CPU(4 CPUs X $40,000/CPU - $160,000)
[47] Allowance for add-on tools in years 2 & 3, Estimate for Web Services production server. BizTalk currently priced at $25,000 per CPU
[48] Vstudio.NET $1,079 per seat. IIS Server is included with Win2000, for Cold Fusion, $500 per development seat plus $2000 per server license – $20,000
[49] Half of prior year expenditure to account for additional development seats. Development tools noted here are for generic, enterprise-wide applications and do not constitute redundant costs with other strategies that also call for development tools
[50] 20% of license costs
[51] Additional user licenses in years 2 and 3
[52] Anticipate initial team of three developers. ($80,000 salary plus 25% benefits/OH = $100,000/staff X 3 staff = $300,000). Augment with additional three hires in years 2 & 3. Staffing costs are associated with content management and portal services, and Year 2 and 3 staff resources are aimed at Web services
[53] One session of training/staff @ $3,000/session

C3. Standardize County technical approach for application integration

Costs	Years 1	2	3	3-Year Total
II. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance	250,000[54]			
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	250,000			
III. II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs	250,000			250,000

[54] Approximately 1,650 hours @ $150/hour of contracted assistance establishing guidelines, evaluating tools, conducting analysis, selecting a methodology, and developing a plan.

C4. Purchase and integrate top quality commercial packaged software wherever possible and cost effective – and with minimal customization.

Costs	Years			3-Year Total
	1	2	3	
I. Capital Costs				
A. Project Planning[55]				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance				
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs				
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing[56]				
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs				

[55] This strategy involves the development of a methodology for selecting new systems focusing first on off-the-shelf applications before building applications.
[56] This work will be absorbed by the TMB and BMC.

C5. Consolidate hardware around the County.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning		60,000[57]		
B. Project Development				
C. Implementation				
1. Hardware				
• Servers		1,200,000[58]		
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance		40,000[59]		
• Temporary Assistance		100,000[60]		
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs		1,400,000		
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs		1,400,000		1,400,000

[57] 400 hours of consulting and project management fees @ $150 /hr. to analyze current capacity and develop plan for new server configuration
[58] 30 new high-end servers at $40,000 per device, equipped to handle the traffic and performance requirements for merged operations.
[59] Consulting support for problem resolution (approximately 250 hours at $150 /hr)
[60] Full year of one temporary FTE @ $100,000 to assist with configuration, consolidation and design

C6. Use broadband technology and a fully integrated PBX architecture as the future centerpiece to converge data, voice, and video transport.

Costs	Years			3-Year Total
	1	2	3	
I. Capital Costs				
A. Project Planning	350,000[61]			
B. Project Development		120,000[62,63]	100,000[62]	
C. Implementation			250,000[64]	
1. Hardware				
• Servers				
• Workstations		30,000[63]		
• Network			360,000[65]	
• Telecommunications		500,000[66]	1,375,000[67]	
2. Software				
• Application		350,000[68]	250,000[69,70]	
• Database				
• Development Tools		75,000[71]		
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance		165,000[72]	195,000[73]	
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other		50,000[74]		
7. Contingency				
Subtotal Capital Costs	350,000	1,290,000	2,530,000	

[61] Strategy implementation planning
[62] PBX- Non-recurring network conversion costs (termination liabilities, physical network terminations)
[63] Broadband- Year 2 will be for planning and analysis, and includes startup costs for establishment of workspace and workstation hardware/software
[64] Broadband- Startup costs for establishment of mini NOC (network monitoring, work order/trouble ticket management system, communications system)
[65] Broadband- GB Edge Device(s) – $300,000 (4 primary nodes, Key Tower and 3 secondary nodes); Cable/Infrastructure (equipment rooms and minor cable at NOC) – $10,000; Test equipment – $50,000 (Network Analyzer)
[66] PBX System hardware upgrades/replacement (will occur in phases over three years) – $250,000 for Year 2; Replacement of Centrex lines with VoIP- Year 2 (250 lines @ $1,000/line = $250,000)
[67] PBX System hardware upgrades/replacement – $100,000; Replacement of Centrex lines with VoIP- Year 3 (1,500 lines @ $850/line)
[68] PBX integration software upgrades – $150,000, + Voice mail systems replacement/upgrades – $200,000 = $350,000
[69] Broadband- Network loading and simulation/measurement software
[70] PBX- Voice mail systems replacement/upgrades
[71] PBX- Network management system tools
[72] PBX- Outsourced assistance for voice system integration- network design ($40,000), Configuration/upgrade analysis ($60,000), public procurements ($10,000), upgrade existing system ($5,000), network management ($20,000), disaster recovery ($30,000)
[73] PBX- Outsourced assistance- public procurements ($10,000), upgrade existing system ($10,000), project management ($100,000), QA ($50,000), staff training ($25,000)
[74] PBX- Establish disaster recovery diverse access to PSTN – hardware/software/programming. Robust disaster recovery planning efforts will be conducted as part of the strategy to strengthen business continuity capabilities

Costs	Years 1	2	3	3-Year Total
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing		325,000[75,76]	522,000[75, 77]	
G. Training			30,000[78]	
H. Hardware				
I. Other				
Subtotal Operating Costs		325,000	552,000	
Grand Total Costs	350,000	1,615,000	3,082,000	5,047,000[79]

[75] PBX- Internal staffing costs associated with voice system integration, including network design, configuration/upgrade analysis, public procurements, network management, and quality assurance

[76] Broadband- Senior Project Manager ($110,000), Senior Financial Analyst ($50,000 - .5 FTE), Senior Tech Analyst ($100,000). Staffing costs represent costs for outsourced assistance.

[77] Broadband- Sr. Project Mgr ($110,000), Sr. Financial Analyst - .25 FTE ($25,000), Sr. Tech Analyst ($100,000), Network Engineer A ($88,000), Network Tech A ($64,000), Customer Support Level 2 ($45,000). Staffing costs represent costs for outsourced assistance. These costs can be reduced by utilizing appropriately qualified agency staff in place of external staff

[78] Broadband- Training costs focus on network loading and simulation/measurement software- 10 sessions @ $3,000/session.

[79] PBX- Relevant costs beyond Year 3 include: PBX system hardware upgrades/replacement ($100,000); replacement of Centrex lines with VoIP (6,000 lines @ $700/line); Voice mail systems replacement/upgrades ($100,000); Outsourced assistance- public procurements ($10,000), upgrade existing system ($10,000), project management ($25,000), QA ($25,000). Total costs beyond Year 3 = $4,200,270.

C7. Institute Countywide best practices for enterprise data management.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance	500,000[80]			
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	500,000			
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training[81]				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs	500,000			500,000

[80] Approximately 2,500 hours @ $200/hour for contracted assistance with defining requirements, developing policies and standards, developing a data model framework, analyzing alternatives, and developing a plan and methodologies.
[81] Training is not planned as staff hired for modeling are expected to be experienced with the tool sets and will self- train.

C8. Design and implement a common architecture to integrate workflow between Law, Safety, and Justice agencies.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning[82]				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance				
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs				
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs[83]				

[82] Planning and design work is anticipated to occur in Years 1 and 2, and implementation in Year 3.
[83] Costs are currently being developed by the LS&J Integration Committee.

C9. Implement a standardized integrated portfolio of enterprise Financial and HR/Payroll applications.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning	600,000[84]			
B. Project Development				
C. Implementation	250,000[85]	500,000[85]	250,000[85]	
1. Hardware				
• Servers		750,000[86]	500,000[86]	
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance		11,720,000[87]	5,367,000[88]	
• Temporary Assistance		1,200,000[89]	538,000[89]	
• ITS Support				
• Agency Staff		3,600,000[87]	1,615,000[88]	
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	850,000	17,770,000	8,270,000	
II. Production (Operating Costs)			2,300,000[90]	
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training		100,000[91]	100,000[91]	
H. Hardware				
I. Other				
Subtotal Operating Costs		100,000	2,400,000	
Grand Total Costs	850,000	17,870,000	10,670,000	29,390,000

[84] Per Dye Report- Implementation Planning ($122,250 in consultant fees plus $24,450 T&E plus 20% contingency- $175,000 rounded; $19,800 in County staff costs plus 20% contingency- $25,000 rounded) and Integrator RFP and Selection ($78,250- consulting plus $15,650 T&E plus 20% contingency- $140,000 rounded; $33,750 plus 20% contingency for County staff-$ 60,000 rounded); an additional $200,000 (approximately 1,350 hours @$150/hour) for requirements definition

[85] An additional $1,000,000 over three years for business process alignment to the package at the agency level. The Dye report accounts for some business transformation and change management, but only in Year 1. These additional costs are for assumed additional process alignment in Year 1 as well as some costs incurred in Years 2 and 3 for change management

[86] Per Dye Report- $1,250,000 during Phases 1, 2 and 3 for hardware for PeopleSoft Release 8 (web server and four- to six-fold increase in application server processor capacity)

[87] Per Dye report- consulting fees plus T&E and County staff costs for Phase 0- $2,520,000 for external staff, $300,000 for internal, and Phase 1, 2 and 3 ($9,200,000 for external staff, $3,300,000 for internal)

[88] Per Dye report- consulting fees plus T&E and County staff costs for Phase 0- $1,260,000 for external staff, $150,000 for internal, and Phase 1, 2 & 3 (3,640,000 for external staff, 1,310,000 for internal), and Phase 4 ($467,000 for external staff, $155,000 for internal)

[89] Backfilling Agency staff with temporary assistance. Costs derived by calculating the difference between Agency staff costs @ $45/hour and a more reasonable estimate of temporary assistance costs @ $60/hour.

[90] Per Dye Report – high end of range for O&M costs

[91] Additional training costs provided as high level estimates by PeopleSoft. Dye report accounts for training of only 40 – 50 users

C9. (Continued) Implement a standardized integrated portfolio of enterprise Financial and HR/Payroll applications.

Additional costs for Year 4 include the following:

Costs	Year 4	Total Years 1-4
I. Capital Costs		
A. Project Planning		600,000
C. Implementation		1,000,000
1. Hardware	1,750,000[92]	1,750,000
• Servers		1,250,000
2. Software		
• Application	3,200,000[93]	3,200,000
3. Staffing		
• Professional Contract Assistance	7,840,000[94]	24,927,000
• Temporary Assistance	2,300,000[95]	4,038,000
• Agency Staff	7,040,000[96]	12,255,000
Subtotal Capital Costs	22,130,000	49,020,000
II. Production (Operating Costs)	5,000,000[97]	7,300,000
B. Maintenance	340,000[98]	340,000
G. Training	100,000[99]	300,000
Subtotal Operating Costs	5,440,000	7,940,000
Grand Total Costs	27,570,000	56,960,000

Assumptions

- These estimates are primarily based on the Dye Management report, "Project Assessment and Implementation Planning: Implementation Plan".
- Costs assume that the County will follow the phased approach outlined within the Dye report.
- The County owns licenses for PeopleSoft.
- Costs are placed in the year based on the timeline presented within the Dye report, with Year 1 of the strategy representing Year 2001 from the Dye report. There is a two-year lag between the Dye report and the STP. The phases from the Dye report which occur in Year 1 include: Detail Implementation Plan and Integrator RFP and Selection Process; Year 2- Phase 0:Vision Validation and Pre-Project Preparation, Phase 1: PeopleSoft HRMS Sustaining, Phase 2: MSA to PeopleSoft HRMS; Year 3- Phase 3: Enhanced HR Functionality, Phase 4: Core Financials Software Evaluation. Phase 5 and 6: Core Financials Implementation occurs in Year 4.
- All costs require that new detailed analysis is conducted concurrent with vendor bids prior to implementation.
- Additional costs will be required to backfill agency staff assigned to the implementation project. Cost figures for King County staff included within the Dye report are assumed to be incurred to hire temporary staff to backfill. Additional costs have been noted for Temporary Assistance based on the difference between the Dye report's assumption of $45/KC staff hour and the assumption that these costs will be closer to $60/hour.
- These costs assume that by the end of Year 3, King County will have accomplished the following: Developed an implementation plan, developed and distributed an RFP for an Integrator, selected an Integrator, verified requirements, conducted appropriate business process alignment activities, upgraded PeopleSoft, implemented full PeopleSoft HRMS suite and migrated current HR/Payroll applications to the new platform, and conducted an evaluation for implementation of a core financials suite of applications.

[92] Per Dye report, replacement hardware costs to replace hardware previously purchased for FSRP, but which has since been redeployed
[93] Phases 5 and 6 focus on Core Financials. High-level estimates provided by PeopleSoft are based on Operating Budgets rather than number of users- For an operating budget of $2,000,000,000, software costs for PeopleSoft financials would be approximately $3,200,000, and include the following applications: General Ledger, Accounts Payable, Purchasing, Accounts Receivable, Billing, Inventory, Projects, Budgeting, Fixed Assets, and Grants.
[94] Per Dye report, Phase 0 consulting costs @ $330,000 plus $4,875,756 plus $975,151 travel and expenses plus 20% contingency for consulting fees for Phases 5 and 6 - 7,510,000 rounded
[95] Approximate difference between Dye report costs for County staff @ $45/hour and assumed actual cost for temporary staff @ $60/hour
[96] Per Dye report, Phase 0 Agency staff costs @ $40,000 plus $5,850,578 plus 20% contingency for County staff- 7,000,000 rounded
[97] Per Dye report - $3,400,000 for PeopleSoft, $1,600,000 for SAP for O & M
[98] Per Dye report, SAP Interim Maintenance fees
[99] Additional training costs provided as high level estimates by PeopleSoft. Dye report accounts for training of only 40 – 50 users

D. Management and Organization

D1. Institutionalize performance measurement for technology.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning[100]				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance				
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs				
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs				

[100] A County committee is assumed to perform the work to support this strategy.

D2. Develop technology design/plans for significant initiatives and projects.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning[101]				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance				
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs				
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs				

[101] Costs associated with this strategy will be absorbed as part of developing Agency technology plans and project plans

D3. Establish a comprehensive project management program.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance	150,000[102]			
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	150,000			
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training	0[103]			
H. Hardware				
I. Other				
Subtotal Operating Costs	0			
Grand Total Costs	150,000			150,000

[102] 1000 hours @ $150/hour consulting time to facilitate development of a project management methodology framework. NOTE: Deployment of the project management methodology framework is assumed to be absorbed within normal workloads

[103] Training required, but covered within a separate strategy for strengthening personnel capabilities through training

D4. Reorganize technology functions around the County.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance	500,000[104]			
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs	500,000			
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing				
G. Training				
H. Hardware				
I. Other				
Subtotal Operating Costs				
Grand Total Costs	500,000			500,000

[104] A total of $500,000 (approximately 2,850 hours @ $175/hour) is estimated for an organizational consultant to conduct a study related to re-organizing technology functions around the County. The project may be segmented into two phases with $400,000 for consulting for the organizational assessment and development of a plan, and an additional $100,000 for facilitating concurrence within the organization.

D5. Strengthen technology management and delivery capabilities through specialized training.

Costs	Years 1	2	3	3-Year Total
I. Capital Costs				
A. Project Planning				
B. Project Development				
C. Implementation				
1. Hardware				
• Servers				
• Workstations				
• Network				
• Telecommunications				
2. Software				
• Application				
• Database				
• Development Tools				
• Reporting Tools				
3. Staffing				
• Professional Contract Assistance				
• Temporary Assistance				
• ITS Support				
• Agency Staff				
4. Support				
5. Project Expenses				
6. Other				
7. Contingency				
Subtotal Capital Costs				
II. Production (Operating Costs)				
A. Facilities				
B. Maintenance				
C. Licenses				
D. Upgrades				
E. Interest				
F. Staffing	31,250[105]	31,250[105]	31,250[105]	
G. Training	750,000[106]	750,000[106]	525,000[107]	
H. Hardware				
I. Other				
Subtotal Operating Costs	781,250	781,250	556,250	
Grand Total Costs	781,250	781,250	556,250	2,118,750

[105] .5 FTE @ $50,000 salary + 25% for benefits/overhead for coordinating training and maintaining the skills inventory
[106] Training in the following areas: Leadership ($250,000/year), Business Analysis ($250,000/year) and Project Management ($250,000/year)
[107] It is anticipated that increased in-house training will decrease the annual training costs in each area to $175,000/year